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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,541	01/13/2006	Akio Sumizawa	029267.56097US	4562
23911 7590 12/21/2010 CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300			EXAMINER SHECHTMAN, CHERYL MARIA	
			ART UNIT 2159	PAPER NUMBER
			MAIL DATE 12/21/2010	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/529,541

**Applicant(s)**

SUMIZAWA ET AL.

**Examiner**

CHERYL M. SHECHTMAN

**Art Unit**

2159

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 September 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 and 14-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 14-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This communication is in response to RCE filed September 9, 2010. Claims 1-11 and 14-22 are pending. Claims 1-3, 6, and 7 are amended. Claims 12 and 13 have been cancelled.

### ***Response to Arguments***

2. Referring to the 35 USC 112 second paragraph rejection of claims 2, 7, 15, 16, 18, 19, and 21, Applicant's amendments are acknowledged and obviate the 35 USC 112 second paragraph rejection noted in the prior Office Action.
3. Applicant's arguments with respect to claims 1-11 and 14-22 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-11 and 14-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 3, and 6 recite the limitation "the individual map area blocks" in para. 2 and 3 of claim 1, para. 3 of claim 3 and para. 4 of claim 6. There is insufficient antecedent basis for this limitation in the claims.

Claims 2, 4, and 7 recite the limitation "the individual map layers" in para. 3 of each of the claims. There is insufficient antecedent basis for this limitation in the claims.

All claims depending from the above also inherit the aforementioned deficiencies by virtue of their dependencies.

Due to the 35 USC 112 rejections set forth above, the claims have been examined as best understood by the examiner.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, 5, 6, 8-11, 17, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Number 6,320,518 issued to Saeki et al (hereafter Saeki), and further in view of US 6,559,865 issued to Angwin.

Referring to claim 1, Saeki discloses a computer readable storage medium having stored therein distribution map data used to distribute a map through communication (map data, Abstract; see Fig. 1), the distribution map data comprising:

- road data in correspondence to each of a plurality of map area blocks (figure parts, col. 3, lines 22-24), the map area blocks ranging over individual areas of the map

which are equal to one another in size (see map grid composed of squares, Fig. 15-17), wherein the road data provides position information indicating positions of roads within the individual map area blocks (figure parts registered with combined information such as coordinate information, col. 8, lines 24-64); and

- integrated name data that provides information for a road such that the integrated name data provides a set of data for the road for use among the individual map area blocks (see set of road information stored with figure parts, see Fig. 2B; col. 8, lines 27-36 and 51-56).

Referring to claim 1, while Saeki discloses all of the above claimed subject matter, it remains silent as to the integrated name data providing for *common name information for a road* such that the integrated name data provides a *single set of name data* for the road for use in all of the individual map area blocks in which the road is present.

However, Angwin teaches analogous art that includes integrated name data that provides common name information for a road such that the integrated name data provides a single set of name data for the road for use in all of the individual map area blocks in which the road is present (*wherein if two branches of a fork in a road have a common name, then the common name that they share is assigned as a sign text variable corresponding to the fork, col. 9, lines 44-52, Fig. 4, element 406 and 408; duplicate street names from sign text variables are removed and merged into a more*

*general named sign text e.g. US 30 West and US 30 East are merged into US 30, col. 9, lines 57-67, Fig. 4, element 412 and 414).*

It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify Saeki to include integrated name data that provides common name information for a road such that the integrated name data provides a single set of name data for the road for use in all of the individual map area blocks in which the road is present, as taught by Angwin.

The ordinary skilled artisan would have been motivated to modify Saeki per the above for the purpose of enabling maximum storage efficiency through the use of compressed data.

Referring to claim 3, Saeki discloses a distribution map data generating method for generating distribution map data used to distribute a map through communication (map data, Abstract; col. 6; see Fig. 1), comprising:

- extracting road data (figure parts, col. 3, lines 22-24) and name data over map area blocks, the map area blocks ranging over individual areas of the map which are equal to one another in size so as to indicate a route passing through the map area blocks (attribute information such as name of a road, col. 8, lines 24-64, see Fig. 2A; see map grid composed of squares, Fig. 15-17), from road map data that provides position information indicating positions of roads in each of the map area blocks (coordinate information, col. 8, lines 24-64; see supplemental node list Fig. 2A) and

that provides name information indicating names of the roads in each of the map area blocks (col. 8, lines 51-56, see Fig. 2A);

- generating integrated name data by integrating name information for a road in the extracted name data, so as to provide information for the road such that the integrated name data provides a set of data for the road for use among the individual map area blocks (see set of road information stored with figure parts, see Fig. 2B; col. 8, lines 27-36 and 51-56); and
- generating the distribution map data by using the extracted road data and the integrated name data (figure parts are stored together with combined information as map data in the map database unit, col. 8, lines 51-67, Fig. 2A-B).

Referring to claim 3, while Saeki discloses all of the above claimed subject matter, it remains silent as to the integrated name data providing for *common name information for a road* such that the integrated name data provides a *single set of name data* for the road for use in all of the individual map area blocks in which the road is present.

However, Angwin teaches analogous art that includes integrated name data that provides common name information for a road such that the integrated name data provides a single set of name data for the road for use in all of the individual map area blocks in which the road is present (*wherein if two branches of a fork in a road have a common name, then the common name that they share is assigned as a sign text variable corresponding to the fork, col. 9, lines 44-52, Fig. 4, element 406 and 408; duplicate street names from sign text variables are removed and merged into a more*

*general named sign text e.g. US 30 West and US 30 East are merged into US 30, col. 9, lines 57-67, Fig. 4, element 412 and 414).*

It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify Saeki to include integrated name data that provides common name information for a road such that the integrated name data provides a single set of name data for the road for use in all of the individual map area blocks in which the road is present, as taught by Angwin.

The ordinary skilled artisan would have been motivated to modify Saeki per the above for the purpose of enabling maximum storage efficiency through the use of compressed data.

Referring to claim 6, the claim is similar to claim 3 in the form of an apparatus (Saeki, Map transmitting apparatus, Fig. 1) and is hereby rejected for the same reasons as claim 3 addressed above.

Referring to claims 5 and 8, the combination of Saeki/Angwin discloses that the route is determined as a road from a start point to an end point based upon the road data; and when extracting the road data and the name data indicating the route, road data and name data contained in an area ranging over a predetermined width along the route are extracted based upon the road map data (Saeki, higher priority setting made for objects within range 50m-100m, col. 13, line 37 – col. 14 line 47; see also col. 16, line 52- col. 17, line 14; Fig 15 and 17; col. 19, line 57 – col. 20, line 36, Fig. 8).



Referring to claims 9 and 17, the combination of Saeki/Angwin discloses a reception device that receives the distribution map transmitted from an external source and a display device that displays the route on a monitor based upon the road data in the received distribution map data and that displays names of roads on the route based upon the integrated name data in the received distribution map data (Saeki, mobile terminal receives and displays map information, col. 15, lines 18-25, Fig. 16; col. 20, lines 28-36; Fig. 1 and corresponding portions of specification).

Referring to claims 10 and 20, the combination of Saeki/Angwin discloses a first position determining device that determines display positions at which the names of the roads on the route are displayed by the display device based on the road types of the roads on the route (Saeki, priority setting can be made by road type, col. 8, lines 27-67, see Fig. 2A-B).

Referring to claims 11 and 22, the combination of Saeki/Angwin discloses a second position determining device that determines display positions at which the names of the roads on the route are displayed by the display device so as to orient the names paralleled to inclinations of the route (Saeki, target overlap display, col. 1, lines 34-62; col. 9, line 61 – col. 10, line 8).

6. Claims 2, 4, 7, 14-16, 18, 19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saeki, in view of Angwin, as applied to claims 1, 3 and 6 respectively, and further in view of US Patent Number 7,308,117 issued to Chitradon et al (hereafter Chitradon).

Referring to claims 2, 4, and 7, the combination of Saeki/Angwin discloses all of the above claimed subject matter and also discloses that the distribution map data includes the road data in each of a plurality of map layers set in correspondence to different specific scaling factors (Saeki, priority settings, col. 8, lines 7-13; col. 10, lines 38-55, Fig. 2B, 3, 4 and 10; col. 2, lines 30-36) and the integrated name data provides the common name information such that the integrated name data provides a single set of name data for the individual map layers and the individual map area blocks (Saeki, static priority settings are set for roads, see Fig. 2B; Angwin, col. 9, lines 44-52, Fig. 4, element 406 and 408; col. 9, lines 57-67, Fig. 4, element 412 and 414).

However, while the combination of Saeki/Angwin discloses all of the above claimed subject matter, it remains silent as to each of the scaling factors having been set in accordance with ratios of distances between points as represented on the corresponding map layer and the actual distances.

However, Chitradon teaches analogous art that includes scaling factors having been set in accordance with ratios of distances between points as represented on corresponding map layers and the actual distances (distance ratio for each level of map, col. 5, lines 5-14).

It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the combination of Saeki/Angwin to include scaling factors having been set in accordance with ratios of distances between points as represented on corresponding map layers and the actual distances, as taught by Chitraddon.

The ordinary skilled artisan would have been motivated to modify the combination of Saeki/Angwin per the above for the purpose of displaying maps with various zoom levels.

Referring to claims 14 and 15, the combination of Saeki/Angwin/Chitraddon discloses that the route is determined as a road from a start point to an end point based upon the road data; and when extracting the road data and the name data indicating the route, road data and name data contained in an area ranging over a predetermined width along the route are extracted based upon the road map data (Saeki, higher priority setting made for objects within range 50m-100m, col. 13, line 37 – col. 14 line 47; see also col. 16, line 52- col. 17, line 14; Fig 15 and 17; col. 19, line 57 – col. 20, line 36, Fig. 8).

Referring to claims 16 and 18, the combination of Saeki/Angwin/Chitraddon discloses a reception device that receives the distribution map transmitted from an external source and a display device that displays the route on a monitor based upon the road data in the received distribution map data and that displays names of roads on the route based upon the integrated name data in the received distribution map data

(Saeki, mobile terminal receives and displays map information, col. 15, lines 18-25, Fig. 16; col. 20, lines 28-36; Fig. 1 and corresponding portions of specification).

Referring to claims 19 and 21, the combination of Saeki/Angwin/Chitradon discloses a first position determining device that determines display positions at which the names of the roads on the route are displayed by the display device based on the road types of the roads on the route (Saeki, priority setting can be made by road type, col. 8, lines 27-67, see Fig. 2A-B).

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl M Shechtman who can be reached on (571) 272-4018. The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trujillo can be reached on (571) 272-3677. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Cheryl M Shechtman/

Examiner, Art Unit 2159

/Wilson Lee/

Primary Examiner, Art Unit 2163

December 15, 2010